

a transportation system responsive to the control system for selectively moving an empty carrier of a certain empty carrier type between a staging area and the first stock area based on a comparison of the empty percentage for the certain carrier type to the predetermined quantity of the first stock area for the certain carrier type.

20. (New) A system for managing empty material carriers in an automated material handling system, the material handling system including a plurality of material carriers that include a plurality of empty material carriers and at least one stock area each including bins for storing material carriers, the system comprising:

means for classifying the empty material carriers into at least two empty carrier types;

means for associating each of the stock areas with at least one threshold for each empty carrier type;

means for computing an empty percentage for each empty carrier type for a first one of the stock areas, the empty percentage for a particular empty carrier type being the percentage of bins of the first one stock area which contain empty carriers of the particular type; and

means for selectively moving an empty carrier of a certain empty carrier type between a staging area and the first stock area based on a comparison of the empty percentage for the certain carrier type for the first stock area to the at least one threshold of the first stock area for the certain empty carrier type.

Remarks

The Office Action dated October 4, 2000 indicated that claims 1-18 stand rejected under §112, second paragraph, for being indefinite. Claims 1-8 and 10-17 stand rejected under §102(e) /§102(f) as being anticipated by *Conboy et al.* (U.S. Patent No. 5,838,566). In addition, claims 1-18 stand rejected under §103(a) as being unpatentable over *Conboy et al.* Favorable reconsideration of this application is requested in view of the above amendment and following remarks. For the reasons set forth below, Applicants respectfully submit that the claimed invention is allowable over the cited reference.

Applicants have amended the specification to correct minor informalities and have amended elements of the claims indicated to overcome the §112 rejections. In addition, claims 1

and 10 have been amended to clarify the claimed element of classifying empty carriers into at least two empty carrier types e.g., page 13, line 15). New claims 19 and 20 have been added, support of which is found in the Specification (e.g., pages 2, 7-8).

Regarding the §102(e) / §102(f) rejection of claims 1-8 and 10-17, Applicants submit that the '566 reference does not anticipate Applicants' claimed invention since not all of the claimed limitations of the invention are taught in the '566 reference. In particular, the '566 reference fails to teach the claimed invention including the limitations directed to classifying the empty carriers into at least two empty carrier types and that the empty percentage calculation is for a particular empty carrier type. The '566 reference, including the citation to column 12, lines 67 *et seq.*, is limited to a teaching concerning only empty carriers and not classifying the empty carriers into at least two empty carrier types. Accordingly, the § 102 rejection should be removed.

Regarding the §103 rejection of claims 1-18, Applicants respectfully submit that the '566 reference does not render obvious the claimed invention for failing to teach or suggest all of the limitations of the claimed invention, including those discussed above. Further, the stated motivation of using global empty move rates "because global parameters are easy to transmit between diverse control modules" does not appear to be evidenced in the cited art. Applicants therefore respectfully traverse the Official Notice taken by the Examiner on the well-known use of global parameters and request that the Examiner provide documentation that teaches the use of global parameters in order that Applicants may have an opportunity to carefully consider the appropriateness of the §103 rejection including the motivation for such a combination. In addition, as acknowledged in the current Office Action (page 7), the '566 reference fails to teach or suggest the global empty move rate claimed in claim 9 of Applicants' claimed invention. In view of the foregoing, Applicants submit that the §103 rejections should be withdrawn.

With respect to the non-statutory double patenting rejection of claims 1-9, Applicants submit that the above-discussed claim limitations, which are neither taught nor claimed in the '566 reference, evidence adequate patentable distinctions, thereby overcoming the double patenting rejection.

If Applicants have overlooked some of the teaching in the prior art and one or more of the rejections be maintained, Applicants would be open to considering submission of a Rule 1.131

Declaration to remove the '566 reference (overcoming the prior art rejections) and/or a Terminal Disclaimer that would render moot the double patenting rejection.

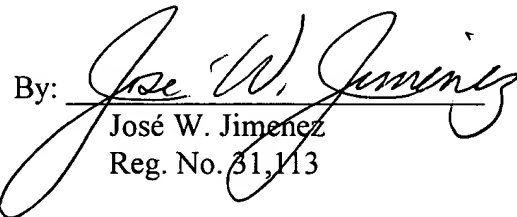
In view of the above, Applicants submit that the rejections should be withdrawn and that all of the claims are now in condition for allowance. Reconsideration and withdrawal of the rejections, along with a favorable response, are earnestly requested. Please proceed to charge Deposit Account No. 01-0365 \$80.00 for one independent claim in excess of three.

Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is encouraged to contact the undersigned at (651) 686-6633.

Respectfully submitted,

Crawford PLLC
1270 Northland Drive, Suite 390
St. Paul, MN 55120
651/686-6633

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By: 
José W. Jiménez
Reg. No. 31,113